AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1.   (currently amended): A method for realizing an end-to-end connection between a

client layer connected to ~~ana~~ ~~RPR (~~Resilient Packet Ring~~)~~ (RPR) network and a client layer

connected to ~~ana~~ ~~MPLS (~~Multi Protocol Label Switching~~)~~ (MPLS) network, the method

comprising:

interconnecting ~~wherein~~ the RPR network and the MPLS network ~~are interconnected~~

through a ~~TLS (~~Transparent LAN Service (TLS) layer.

2.   (currently amended):   A method as in claim 1, wherein the RPR network and the

MPLS network are further interconnected through an interface consisting in a physical layer,

wherein the physical layer is at least one of ~~like, but not limited to,~~ a Synchronous Digital

Hierarchy (SDH) ~~or,~~ Synchronous Optical Networking (SONET), ~~or~~ and an Ethernet.

3.   (currently amended): A method as in claim 1, wherein ~~it~~ the method further

comprises ~~the following steps~~:

—in the direction from RPR to MPLS:

—encapsulating received client frames ~~are encapsulated~~ in TLS packets, indicating the

final destination;

—encapsulating the TLS packets ~~are then encapsulated~~ in RPR packets -and

~~passed~~passing the encapsulated TLS packets to the MPLS network;

−wherein the TLS packets become MPLS packets and travel in the MPLS network until the final destination;

−in the direction from MPLS to RPR:

−encapsulating received client frames ~~are encapsulated~~ in MPLS packets, indicating ~~the~~ a ~~LSP~~ (Label Switched Path (LSP) that has to be followed up to the final destination;

−switching the MPLS packets ~~are switched~~ inside the MPLS network and then ~~passed~~ passing the switched MPLS packets to the TLS network, becoming TLS packets;

−encapsulating the TLS packets ~~are then encapsulated~~ in RPR packets and wherein the encapsulated PLS packets travel in the RPR network, until the final destination.

4.   (original): A method as in claim 3, wherein an auxiliary TLS Header is added to said received client frames, obtaining said TLS packets; then an RPR Header is added to said TLS packets, obtaining said RPR packets, and in that said TLS Header contains a channel identifier field, identifying the connection between the client layer connected to the RPR network and the client layer connected to the MPLS network, said TLS Header further containing Reserved bits and Error correction bits.

5.   (original): A method as in claim 4, wherein in the direction from RPR to MPLS, the TLS header is converted in an MPLS Header by the following steps:

- the TLS channel identifier field is left unchanged and becomes the MPLS Label in the MPLS header;

- TLS Reserved bits are left unchanged and put in the MPLS header;

- the TLS Error correction bits are removed and a predefined MPLS Time-to-live value is inserted in the MPLS header.

6.   (original): A method as in claim 5, wherein in the direction from MPLS to RPR, the MPLS Header is converted in a TLS Header by the following steps:

- the MPLS Label field is left unchanged and becomes the TLS channel identifier field;

- MPLS Reserved bits are left unchanged and put in the TLS header;

- the MPLS Time-to-live is removed and TLS Error correction bits are inserted in the TLS Header.

7.   (currently amended): A method as in claim 1, wherein the client layer is one of an Ethernet layer or and an Internet Protocol (IP) layer.

8.   (currently amended): A telecommunication transmission network for end-to-end connection, where a first and a second client layer exchange information, wherein it the network comprises:

    -an RPR (Resilient Packet Ring (RPR) network connected to the first client layer;

    -an MPLS (Multi Protocol Label Switching (MPLS) network connected to the second client layer;

    -a TLS (Transparent LAN Service (TLS) layer interconnecting the RPR and the MPLS networks.

9.   (currently amended): A telecommunication transmission network as in claim 8, wherein the RPR network and the MPLS network are further interconnected through an interface

consisting ~~in~~ of a physical layer, wherein the physical layer is at least one of ~~like~~a Synchronous Digital Hierarchy (SDH), ~~or~~a Synchronous Optical Networking (SONET) ~~or~~and an Ethernet.

10.   (currently amended): An RPR node suitable to implement the method of claim 4, wherein ~~it~~the RPR node comprises:

means for adding the TLS Header to the RPR Header~~,~~; and

means for selecting a port connected to a corresponding port of a node of the MPLS network, on the basis of the channel identifier field value.

11.   (currently amended): An MPLS node suitable to implement the method of claim 6, wherein ~~it~~the MPLS node comprises:

means for converting the TLS Header into an MPLS Header and~~/or~~ vice-versa~~,~~; and

means for selecting a port connected to a corresponding port of a node of the RPR network, on the basis of the Label value.

12.   (currently amended): ~~Computer~~A computer program embodied on a computer-readable medium comprising computer program code means adapted to perform all the steps of claim 1 when said program is run on a computer.

13.   (previously presented): A computer readable medium having a program recorded thereon, said computer readable medium comprising computer program code means adapted to perform all the steps of claim 1 when said program is run on a computer.

14.   (currently amended): ~~Computer~~A computer program embodied on a computer-readable medium comprising computer program code means adapted to perform all the steps of claim 8 when said program is run on a computer.

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15.   (previously presented): A computer readable medium having a program recorded thereon, said computer readable medium comprising a computer program means adapted to perform all the steps of claim 8 when said program is run on a computer.